DOCUMENT RESUME

ED 133 414 UD 016 682

AUTHOR Jones, Allan P.; And others
TITLE Black-White Differences in Work Environment Perceptions and Job Satisfaction and its Correlates.
INSTITUTION Texas Christian Univ., Fort Worth. Inst. of Behavioral Research.
SPONS AGENCY Naval Medical Research and Development Command, Bethesda, Md.; Office of Naval Research, Washington, D.C.
REPORT NO ONR-76-RR042-08-01 NR170-743
PUB DATE Sep 76
CONTRACT MIPR03.08-3014; N00014-72-A-0179-0001
NOTE 26p.; To be published in "Personnel Psychology," 1977

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Caucasian Race; *Comparative Analysis; *Enlisted Personnel; *Job Satisfaction; Negro Attitudes; *Negroes; Participant Satisfaction; *Racial Differences; Work Attitudes

ABSTRACT

One hundred and sixty-six Black and 1,451 White sailors assigned to the same shipboard divisions were compared on job satisfaction. Differences in satisfaction were explored with regard to two hypothesized sources-differences in individual needs and differences in work conditions. Individual perceptions of the work environment were measured by a 145-item psychological climate questionnaire developed for this study. In addition to psychological climate, items were included to measure individual need strength and satisfaction regarding various job-related areas such as pay, social needs, etc. Comparisons on various individual and background measures indicated that Blacks tended to be slightly older, and to have lived in larger cities and smaller houses. Blacks reported higher scores on self-esteem. Blacks and whites were similar in job-related attitudes. The hypothesis that differences in satisfaction and other work-related attitudes reflected different work conditions was not supported in terms of perceptions of climate. There was more support regarding differences in need strength. (Author/AM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED133414

Black-White Differences in Work Environment Perceptions and Job Satisfaction and Its Correlates

Allan P. Jones, Lawrence R. James,
John R. Bruni, and S. B. Sells
Institute of Behavioral Research
Texas Christian University

Report Number 76- , supported by Naval Medical Research and Development Command, Department of the Navy, under Research Work Unit MPN03.08-3014, and under Office of Naval Research Contract N00014-72-A-0179-0001, Office of Naval Research Project RR042-08-01 NR170-743.
The views presented in this paper are those of the authors. No endorsement by the Department of the Navy has been given or should be inferred.

The authors would like to thank C. W. Hornick for his assistance in various phases of this research.

Requests for reprints should be sent to the senior author who is presently at:
Naval Health Research Center
San Diego, California 92152

ED016682

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Allan P. Jones
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

Running Head: Black-White Differences

In Press: Personnel Psychology

Black-White Differences in Work Environment Perceptions and Job Satisfaction and Its Correlates

Allan P. Jones, Lawrence R. James,
John R. Bruni, and S. B. Sells

Abstract

Numerous studies have reported racial differences in intelligence, abilities, motivation, job satisfaction, and so forth. Relatively few of these studies, however, limited their comparisons to blacks and whites experiencing similar work conditions. The present effort compared black (n = 166) and white (n = 1451) sailors assigned to the same shipboard divisions in order to investigate possible differences in perceived work conditions, satisfaction, need strength, and relationships among these variables. Also explored were two hypothesized sources of race-related satisfaction differences -- differences in perceived work conditions and differences in need strength. The results tended to support the need strength hypothesis although satisfaction differences were fewer than expected.

Black-White Differences in Work Environment Perceptions and Job Satisfaction and Its Correlates

Studies comparing blacks and whites have reported that blacks have higher occupational aspirations but lower job expectations, are less oriented toward planning for the future, have a lower degree of achievement orientation, and score lower than whites on a variety of psychological tests, although such differences were often confounded by social class (cf. Dreger & Miller, 1968; Kirkpatrick, 1973; Wrightsman, 1972). Racial differences have also been reported in various job-related attitudes, especially satisfaction (Slocum & Strauser, 1972). For example, black CPA's, black hospital nursing and clerical staff (O'Reilly & Roberts, 1973), and black civil service and bank employees (Smith, Smith, & Rollo, 1974) reported lower satisfaction levels than their white co-workers. Such findings have not been unanimous, however. Katzell, Ewen, and Korman (Note 1) found few black-white differences in satisfaction among blue-collar workers. Where differences were found, blacks tended to score higher. Gavin and Ewen (1974) found that black, male, blue-collar employees of a major airline reported greater satisfaction than their white counterparts on all factors except supervision. Finally, Vinson and Mitchell (Note 2) reported a race-by-level interaction where blacks at higher organizational levels were more satisfied and performed better than whites at those levels. As stressed by Kirkpatrick (1973), however, the issue lies not in discovering and documenting such race-related

differences, but rather in understanding their sources and behavioral and performance outcomes.

One potential explanation for racial differences in job satisfaction postulated systematic differences in individual motivational structure (i.e., needs, valences, expectancies, comparison levels, etc.). Arvey and Mussio (1974) found that culturally disadvantaged, civil service, clerical workers viewed extrinsic outcomes (getting along with co-workers, safe and secure employment, high salary) as most important, whereas advantaged workers valued intrinsic aspects such as feelings of accomplishment and use of abilities in addition to safe and secure employment. Similar findings were reported for CPA's (Slocum & Strauser, 1971). In the related area of expectations, Arvey and Mussio indicated that culturally disadvantaged workers might believe that job performance does not (for them) lead to such rewards as recognition and advancement. Finally, Bowerman and Campbell (1965) reported that both blacks and whites aspired to white-collar occupations, but blacks were more likely to expect blue-collar or military jobs.

Such results suggest that the individual's frame of reference, based in part upon subcultural membership, influences both perceptions of the job and the particular aspects seen as satisfying or dissatisfying. The picture is complex, however. Greenhaus and Gavin (1972) found that blacks had more favorable expectations of job related rewards, although there were no differences in rated importance of these rewards. Smith et al. (1974) reported that even though differences existed in level of satisfaction, blacks and whites yielded the same underlying dimensions when satisfaction responses were factor analyzed. Similar results were reported by Gavin and Ewen (1974).

Finally, Greenhaus and Gavin found neither the relative powerlessness nor external control orientation reported by other studies comparing blacks and whites.

In addition to the foregoing hypothesis regarding differences in motivational characteristics, it has been suggested that differences in satisfaction reflect divergent work conditions for blacks and whites, stemming from such diverse sources as biased selection procedures, differential assignment to particular types of jobs (Kirkpatrick, 1973), prejudice from other work group members (Pecorrella, Note 3), or simply the predominance of whites in leadership positions (Fox & Lefkowitz, 1974). Such findings underscore the Gavin and Ewen (1974) caution that job-related perceptions and attitudes should be compared only for blacks and whites employed under similar conditions.

The following study compared black and white sailors on job-related satisfaction. Differences in satisfaction were explored in regard to two hypothesized sources — differences in individual needs and differences in work conditions, although measurement of the latter was restricted to perceptions of the environment. Comparisons were limited to members of organizational subsystems (i.e., divisions) which contained both blacks and whites. The study used data collected during a larger research program designed to explore the effects of the shipboard environment upon individual attitudes and behavior and organizational performance. Because race was a secondary variable in the larger study, many potentially salient measures such as perceived prejudice and discrimination were not included. On the other hand, the data provided an opportunity to investigate several relevant relationships between racial background and perceptual and attitudinal measures. In

addition, comparisons were made on selected individual level characteristics in order to explore possible systematic differences between black and white respondents.

Method

Subjects

The sample consisted of male, U.S. Navy enlisted personnel (n = 4,315) on 20 ships operating in the Atlantic and Pacific Oceans in the latter half of 1973. These ships included two aircraft carriers with crews of approximately 4,000 men and four classes of destroyers with crews averaging between 225 and 375 men. Ships were organized into four or more departments, each responsible for a major set of duties such as engineering, supply, or weapons. Departments were further subdivided into relatively homogeneous divisions; for example, the engineering department consisted of divisions concerned with the main propulsion unit (M division), boilers (B division), electrical systems (E division), and so forth. These divisions tended to be rather small (average of 16 men on destroyers) and generally consisted of sailors in similar job specialties or ratings.

Due to their large size, sampling on carriers was stratified by department and division and limited to non-aviation personnel. Destroyers were sampled on a 100% basis. Questionnaires were administered in group sessions during the first weeks of deployment. Data on race were available for 2,819 whites and 166 blacks. The present study, however, included only sailors from divisions to which the blacks were assigned. It was expected that this communality of division membership, combined with the relatively small size

and generally homogeneous duties of the division, would provide a maximum probability of similar work conditions. The resulting subsample was approximately 90% white (n = 1,451) and 10% black (n = 166), and appeared similar to the total sample of 4,315. Both age (M = 23.3 years) and time in the Navy (M = 4.4 years) reflected substantial turnover at the end of the first enlistment (the mean age for the total sample was 23.8 years; mean tenure was 4.8 years). Levels ranged from E-1, the lowest enlisted pay grade, to E-9, the highest enlisted grade.

Instruments

Individual perceptions of the work environment were measured by a 145-item psychological climate questionnaire. The items represented 35 a priori composites describing various aspects of the job or task, leadership characteristics of the immediate supervisor, and aspects of the work group, major subsystems, and the total organization. The instrument and its development are discussed in detail elsewhere (Jones, James, Bruni, Hornick, & Sells, Note 4), thus the present description is brief. This earlier development, on the sample of 4,315 sailors, component analyzed the a priori composites and found six components with eigenvalues of 1.0 or greater: a) Conflict and Ambiguity, reflecting conflict and ambiguity of organizational goals, objectives, structure, and roles, as well as poor communication and low interdepartmental cooperation; b) Job Challenge, Importance, and Variety, reflecting perceptions of the job as challenging, important to the Navy, involving a variety of duties, demanding high quality performance, and providing for feedback and autonomy; c) Leadership Facilitation and Support, reflecting the

leader helping to achieve work goals through scheduling, planning, and so forth, as well as the extent to which he encouraged interpersonal relationships and provided personal support; d) Workgroup Cooperation, Friendliness, and Warmth, which described the perceived quality of workgroup relationships; e) Professional and Organizational Esprit, reflecting perceived external image and desirable growth potential of the Navy, combined with an open atmosphere to express thoughts and ideas as well as consistently applied organizational policies; and f) Job Standards, reflecting jobs seen as having rigid standards of quality and accuracy, combined with feelings of mistrust by management and inadequate time or resources to accomplish the task.

This last component was somewhat specific, with only one loading above $|\pm .50|$. The first five components were demonstrated to be generalizable across military and civilian, managerial and non-managerial samples, although the sixth tended to be sample specific (Jones, et al., Note 4). These six psychological climate components, with scores calculated by a direct solution method (Harman, 1967), were used in the present study to describe perceived work conditions.

In addition to psychological climate, items were included to measure individual need strength and satisfaction regarding various job-related areas such as pay, social needs, security, and so forth. Both the need strength and satisfaction items were based upon the Porter need hierarchy, using items reported by Hackman and Lawler (1971) as the major framework. A separate four-item composite (α = .85) measured general satisfaction with the Navy.

The questionnaire also included a six-item composite (α = .73) reflecting job involvement (Lodahl & Kejner, 1965), a four-item composite (α = .90)

reflecting internal work motivation (Hackman & Lawler, 1971), a four-item measure (α = .54) of the individual's self-esteem, and three five-option items reflecting preenlistment disciplinary record, the size of the town in which the sailor was raised, and the size of his childhood house. Additional self-report data included age, time in the Navy, training received, education, and current enlistment. Finally data regarding race, score on the General Classification Test (GCT), pay grade, rating, division assignment, type of job (unskilled, medium level mechanical, clerical and low level technical, and high level skilled) and promotion rate (standardized by time in the Navy [cf., Jones, et al., Note 4]) were obtained from ship records. Race was coded as a dichotomous variable; blacks received a score of one and whites received a two. A point-biserial correlation coefficient[1] was used for comparisons.

Results

When black and white sailors from the same divisions were compared on various individual and background measures (See Table 1), the black sailors tended to be slightly older, to have received lower scores on the GCT, and to have lived in larger cities and smaller houses (perhaps reflecting general differences in socioeconomic status). In addition, the black sailors reported somewhat higher scores on self-esteem. Blacks also tended to have been in the Navy longer, had completed fewer advanced training schools, and were more likely to be working at the more routine, non-technical jobs. No differences were found in age at entering the Navy, self-reported preenlistment disciplinary record, pay grade, or number of men supervised.

(Insert Table 1 about here.)

Black and white sailors were relatively similar in job-related attitudes. No differences were found for general satisfaction with the Navy or with such aspects as security, social need fulfillment, training, opportunities for promotion, treatment by superiors, esteem and ego needs, autonomy, or self-actualization. Blacks did, however, report higher levels of satisfaction on items reflecting pay, rules and regulations regarding appearance, and opportunities to get a better job in the Navy. Both blacks and whites tended to score at or below the scale midpoint on most of the satisfaction measures. Only in regard to social needs did both groups indicate a positive level of satisfaction. Finally, blacks reported significantly higher levels of job involvement and internal work motivation. Both groups scores below the scale midpoint on the job involvement scale and above on the internal work motivation measure.

(Insert Table 2 about here.)

The hypothesis that differences in satisfaction and other work-related attitudes reflected different work conditions was not generally supported in terms of perceptions of climate. Significant differences were found only for the Professional and Organizational Esprit component (r_{pb} [1615] = -.15, $p < .05$), where blacks were somewhat more likely to perceive the Navy as having desirable growth potential, attractive external image, and an open atmosphere. There was somewhat more support for the hypothesis regarding differences in need strength. As shown in Table 3, white sailors reported generally higher needs, especially in those areas which are frequently referred to as intrinsic. For example, whites reported higher needs related to autonomy, self-actualization, job challenge, job variety, completing a job,

and social needs. No differences were found for security, feedback, or esteem and ego needs.

(Insert Table 3 about here.)

In an attempt to explore further racial differences in job attitudes, correlations between psychological climate scores and attitudes were compared (See Table 4). Relatively few differences were found. Satisfaction of social needs was more highly related to perceptions of Conflict and Ambiguity for the black sailor, and general Navy satisfaction was more highly related to esprit for the white sailor. In general, however, the data indicated similar relationships between perceptions of the work environment and attitudinal responses. In both groups, satisfaction with the Navy and with facets of the environment often referred to as intrinsically satisfying were most strongly related to jobs and environments seen as challenging. Job involvement and satisfaction of extrinsic type needs were more strongly related to the esprit component (a major aspect of this component was the relative image and growth potential of the Navy).

(Insert Table 4 about here.)

Discussion

On the basis of the popular media and much of the psychological literature, certain differences were expected between black and white sailors. For example, blacks were expected to be more dissatisfied based on previous literature reporting that blacks are generally assigned to less challenging jobs, are treated differently by superiors, and work under different conditions than whites. It was also expected that black sailors would bring a different set of abilities, needs, and expectations to the shipboard situation and

thus respond differently from their white co-workers.

Differences in satisfaction were found, but they were not in the predicted direction. Black sailors tended to report higher scores on the more extrinsic measures of satisfaction such as pay, rules and regulations regarding military appearance, and opportunities to get a better job in the Navy. On the other hand, there were no differences on measures of the more intrinsic areas of satisfaction or satisfaction with treatment by others.

In regard to the hypothesis that racial differences in satisfaction and work-related attitudes reflect systematic differences in work conditions, the findings were mixed. Although comparisons were limited to members of the same divisions, there was a slight indication that the average black respondent had completed fewer advanced training schools (r_{pb} [1615] = .09, $p < .05$), and was more likely to be working in a relatively routine, lower skill job (r_{pb} [1615] = -.11, $p < .05$)[2]. On the other hand, no differences were found on such measures as pay grade, number of men supervised, or promotion rate. Moreover, there were significant differences on only one of the six psychological climate components, suggesting similar perceptions of the work environment. Such similarity of perception combined with division homogeneity would tend to argue for a general similarity of conditions related to the job and work situation.

The absence of differences in satisfaction with social needs and treatment from superiors is worthy of special attention. Although the study did not directly address perceptions of prejudice or discrimination, blacks did not appear to perceive differences in treatment by superiors, nor did they indicate a curtailment of desired opportunities for interaction with other

crew members. This interpretation was reinforced by the similarity of scores on the measure of cooperation, friendliness, and warmth of the work group. Such similarity does not necessarily mean that black sailors perceived no prejudice or discrimination aboard the ship, but only that such feelings were not reflected in the areas explored by the present study. Finally, there was a stronger relationship between perceptions of Conflict and Ambiguity and dissatisfaction on social needs among black sailors, partially supporting the argument by Gavin and Ewen (1974) that work group closeness moderates the impact of prejudice-related stress.

The hypothesis regarding different need strengths among blacks and whites received somewhat stronger support. Blacks reported significantly lower levels of need strength on all measures except security, esteem and ego, and job feedback needs. When such differences in need strength were viewed within the context of the similarities in correlates of satisfaction, the viability of the need strength hypothesis was further enhanced. In both groups, for example, satisfaction was highest in jobs perceived as challenging, although blacks who perceived their climate as challenging were more likely than white sailors to report generally higher needs. The data did not indicate whether blacks who qualified for the advanced training required by the more challenging jobs had stronger needs to begin with, or whether the satisfaction of these needs in the work environment served to increase them. Investigation of reasons for such racially related differences in the challenge-need strength relationship would appear useful for future research.

It was suggested also that blacks bring different expectations to their work and that differences in satisfaction reflect different comparison levels

due to a reduced availability of employment alternatives for blacks. Bowerman and Campbell (1965), for example, reported that the military offers a career for the black which conforms to his expectations and compares most favorably with available alternatives. Although the issue was not addressed directly, the data indirectly supported this interpretation in the higher scores for blacks on the measures of Professional and Organizational Esprit and satisfaction, and by the lack of significant differences in promotion rate.

In summary, when the comparison of black and white sailors was restricted to individuals in the same organizational subsystems (i.e., divisions), many of the expected race-related differences were not evident. Differences that were found were low to moderate in magnitude and tended to show black sailors as having more positive attitudes toward the Navy than were found for their white counterparts. Such differences appeared to reflect lower needs reported by black sailors rather than differences in perceived work conditions. Satisfaction scores also appeared to reflect differences in comparison level, where the military offered a more attractive career option for the black (perhaps due to a perceived restriction of non-military options). The results of this study further underscore the need to consider the comparability of organizational experience when exploring possible race-related differences. Insofar as race-related characteristics often co-vary with selection decisions, a failure to consider such comparability might lead to unwarranted conclusions regarding differences in responses for different racial groups, and might obscure many important areas of similarity.

Reference Notes

1. Katzell, R. A., Ewen, R. B., & Korman, A. K. The job attitudes of black and white workers: I. Male blue-collar workers in six companies. Unpublished manuscript, New York University, 1972.

2. Vinson, E., & Mitchell, T. R. Black and white differences in motivation: An expectancy approach (Technical Report 73-51). Seattle: University of Washington, 1973.

3. Pecorrella, P. A. Predictors of race discrimination in the Navy (Institute for Social Research Technical Report). Ann Arbor: University of Michigan, 1975.

4. Jones, A. P., James, L. R., Bruni, J. R., Hornick, C. W., & Sells, S. B. Psychological climate: Dimensions and relationships (Institute of Behavioral Research Report No. 75-3). Fort Worth: Texas Christian University, 1975.

References

Alf, E., & Abrams, N. A significance test for biserial r. Educational and Psychological Measurement, 1971, 31, 637-640.

Arvey, R. D., & Mussio, S. J. Job expectations and valences of job rewards for culturally disadvantaged and advantaged clerical employees. Journal of Applied Psychology, 1974, 59, 230-232.

Bowerman, C. E., & Campbell, E. Q. Aspirations of southern youth: A look at racial comparisons. Transaction, 1965, 2, 24.

Dreger, R. M., & Miller, K. S. Comparative psychological studies of Negroes and Whites in the United States: 1959-1965. Psychological Bulletin Monograph Supplement, 1968, 70.

Fox, H., & Lefkowitz, J. Differential validity: Ethnic group as a moderator in predicting job performance. Personnel Psychology, 1974, 27, 209-223.

Gavin, J. F., & Ewen, R. B. Racial differences in job attitudes and performance: Some theoretical considerations and empirical findings. Personnel Psychology, 1974, 27, 455-464.

Greenhaus, J. H., & Gavin, J. F. The relationship between expectancies and job behavior for white and black employees. Personnel Psychology, 1972, 25, 449-455.

Hackman, J. R., & Lawler, E. E., III. Employee reaction to job characteristics. Journal of Applied Psychology Monograph, 1971, 55, 259-286.

Harman, H. H. Modern factor analysis. Chicago: University of Chicago Press, 1967.

James, L. R., & Jones, A. P. Organizational climate: A review of theory and research. Psychological Bulletin, 1974, 81, 1096-1112.

Lord, F. J., & Novick, M. R. Statistical theories of mental test scores. Reading, Mass.: Addison-Wesley, 1968.

Kirkpatrick, J. J. Occupation, aspiration, opportunity and barriers. In K. A. Miller & R. M. Dreger (Eds.), Comparative studies of whites and blacks in the United States. New York: Seminar Press, 1973.

Lodahl, T. M., & Kejner, M. The definition and measurement of job involvement. Journal of Applied Psychology, 1965, 49, 24-33.

McNemar, Q. Psychological statistics (4th ed.). New York: John Wiley & Sons, Inc., 1969.

O'Reilly, C. A., III., & Robert, K. H. Job satisfaction among whites and non-whites: A cross-cultural approach. Journal of Applied Psychology, 1973, 57, 295-299.

Slocum, J. W., Jr., & Strauser, R. H. Racial differences in job attitudes. Journal of Applied Psychology, 1972, 56, 28-32.

Smith, P. C., Smith, O. W., & Rollo, J. Factor structure for blacks and whites of the job descriptive index and its discrimination of job satisfaction. Journal of Applied Psychology, 1974, 59, 99-100.

Wrightsman, L. R. Social psychology in the seventies. Monterey, Calif.: Brooks/Cole, 1972.

Footnotes

[1]Analysis of data with a pronounced skew presents many problems. Some authors (Alf & Abrams, 1971; Lord & Novick, 1968) recommend the biserial correlation coefficient as less affected by the point of dichotomy and, therefore, more generalizable in its results. Other authors (McNemar, 1969) have suggested that the biserial is not indicated when the skew is extreme and the variable is not continuous. In the present study, the point-biserial correlation coefficient and a t-test corrected for unequal variance were calculated. Since no differences were found, only the point-biserial correlation coefficient is reported.

[2]Black respondents also tended to have received lower scores on such written tests as the General Classification Test, and thus appeared to have been less likely to qualify for the advanced training schools leading to some of the more technological positions. Issues of the validity or potential bias of such tests were not addressed by the present study.

Table 1

Comparison of Individual Characteristics for Black and White Sailors in Divisions Having Blacks

Variable	Mean White[a]	Mean Black[b]	r_{pb}
Age	23.11	24.60	-.09*
Years of education	11.94	11.97	-.01
GCT score	54.75	47.19	.24*
Ego needs	11.55	12.47	-.11*
Self-esteem	13.66	14.27	-.08*
Size of home town	2.46	2.93	-.11*
Size of house as a child	2.78	2.33	.13*
Age at entering Navy	2.54	2.57	-.01
Time in the Navy (months)	51.77	66.83	-.08*
Pay grade	3.81	3.86	-.01
Current enlistment	1.46	1.76	-.09*
Number of men supervised	3.83	4.65	-.03
Advanced training schools (A & B) completed	.74	.52	.09*
Other training schools completed	1.42	1.42	.00
Assignment to unskilled job	1.24	1.40	-.11*

[a] n = 1,451

[b] n = 166

*$p < .05$

Table 2

Comparison of Satisfaction and Job-Related Attitudes for Black and White Sailors from Divisions with Blacks

Attitude	Means		Scale Midpoint	r_{pb}
	White[a]	Black[b]		
Job involvement	15.41	17.11	18	-.11*
Internal work motivation	15.14	15.88	12	-.07*
Overall Navy satisfaction	10.30	11.15	12	-.05
Security	2.97	3.04	3	-.02
Social	3.39	3.30	3	.03
Esteem and ego needs	11.44	11.84	12	-.04
Autonomy	8.70	8.80	9	-.01
Self-actualization	5.81	6.02	6	-.03
Pay	2.22	2.47	3	-.17*
Rules and regulations regarding appearance	2.39	2.81	3	-.11*
Opportunities to get a better job in the Navy	2.60	2.84	3	-.07*
Training received for present job	2.88	2.96	3	-.02
Opportunity for promotion	3.01	2.97	3	.01
Amount of respect and fair treatment from superiors	2.99	3.15	3	-.04

[a] n = 1,451

[b] n = 166

*$p < .05$

Table 3

Comparison of Black and White Sailors on Need Strength Scores

Need Strength Area	Means: White[a]	Means: Black[b]	Scale Midpoint	r_{pb}
Security	3.67	3.62	3.0	.01
Social	3.69	3.42	3.0	.07*
Esteem and ego	13.68	13.10	12.0	.05
Autonomy	11.29	10.49	9.0	.09*
Self-actualization	7.67	7.26	6.0	.07*
Complete a job	7.59	7.20	6.0	.07*
Job feedback	7.69	7.51	6.0	.03
Job challenge	3.80	3.60	3.0	.07*
Job variety	3.73	3.52	3.0	.07*

[a] n = 1,451

[b] n = 166

*$p < .05$

Table 4

Comparison of Correlations between Psychological Climate Components and Organizationally Related Attitude Scores for Black and White Sailors in Divisions with Blacks

	Psychological Climate Components					
Attitudes	Conflict & Ambiguity	Challenge, Importance, & Variety	Leadership Facilitation	Cooperation, Friendliness, & Warmth	Professional & Organizational Esprit	Job Standards
Satisfaction						
Security	-.20* (-.32)*	.32* (.34)*	.23* (.18)*	.21* (.13)	.28* (.11)	-.09* (.06)
Social	-.24* (-.40)*	.21* (.33)*	.16* (.14)	.17* (.12)	.04 (-.01)	-.03 (-.09)
Esteem-ego	-.22* (-.26)*	.43* (.37)*	.22* (.24)*	.25* (.21)*	.36* (.23)*	-.11* (-.07)
Autonomy	-.20* (-.31)*	.41* (.36)*	.31* (.38)*	.22* (.15)*	.31* (.23)*	-.20* (-.08)
Self-actualization	-.21* (-.29)*	.45* (.44)*	.19* (.22)*	.21* (.20)*	.32* (.20)*	-.05 (.00)
Pay	-.09 (.08)	.09* (.04)	.12* (.06)	-.01 (.14)	.36* (.25)*	-.09* (-.10)
Rules and regulations	-.19* (-.23)*	.18* (.30)*	.13* (.14)	.04 (.13)	.38* (.14)	-.04 (-.09)
Opportunities for better job	-.17* (-.18)*	.29* (.28)*	.18* (.13)	.10* (.16)*	.37* (.24)*	-.08* (-.01)
Training	-.18* (-.07)	.27* (.33)*	.17* (.17)*	.13* (.05)	.27* (.16)*	-.05 (-.04)
Opportunity for promotion	-.21* (-.35)*	.26* (.29)*	.18* (.19)*	.04 (.01)	.22* (.14)	-.07* (-.08)

*$p < .05$

( ) correlations for black sample appear in parentheses.

NOTE: Underlined correlation pairs indicate significant differences, $p < .05$.

Attitudes	Conflict & Ambiguity	Challenge, Importance, & Variety	Leadership Facilitation	Cooperation, Friendliness, & Warmth	Professional & Organizational Esprit	Job Standards
	Psychological Climate Components					
Satisfaction (continued)						
Respect from superiors	-.22* (-.12)	.25* (.23)*	.46* (.39)*	.18* (.18)*	.23* (.15)*	-.18* (-.16)*
General Navy satisfaction	-.20* (-.13)	.45* (.45)*	.16* (.20)*	.26* (.25)*	.44* (.27)*	-.06 (-.06)
Job Involvement	.04 (.05)	.31* (.28)*	.08 (.08)	.09* (.08)	.36* (.35)*	.04 (.17)*
Internal Motivation	.09* (.00)	.29* (.41)*	.10* (.05)	.13* (.08)	.13* (-.04)	.10* (.16)*